Commenters have identified specific requirements for which adequate monitoring is either absent from the draft Refinery Permits or insufficient to assure compliance with applicable requirements. These comments are discussed below. Until sufficient monitoring is incorporated into refinery Title V permits, they should not be finalized as drafted.

Finally, although Commenters agree that, in some cases, existing monitoring is adequate on its face and the District need not explain how it was derived—such as is the case with CEM monitoring, it does not follow that the District does not have to explain its CEM equivalency determination in the Statements of Basis for the draft Refinery Permits. *See* Dist. Resp. Comments at 17-18.

For additional comments regarding monitoring, *see below; see also* Section III and 2002 Refinery Comments.

### *ii. Inadequate Monitoring To Assure Compliance*

#### a. Insufficient Monitoring for Opacity, Filterable Particulate, and Nuisance Fallout

As stated in our previous comments, a large number of refinery sources have federally enforceable limits for opacity, filterable particulate ("FP"), and nuisance fallout, pursuant to BAAQMD Regulations 6-301, 6-310, and 6-305, respectively. These sources and the applicable limitations are listed in Table VII of the Title V Permit for the Avon Tesoro refinery.[23] For these sources, the District proposes no monitoring to ensure compliance with the applicable limits. This is inconsistent with federal regulations on monitoring. *See* 40 C.F.R. § 70.6(a)(3), 40 C.F.R. § 70.6(c)(1). The District must impose additional monitoring requirements in all the draft Refinery Permits to ensure compliance in these cases, and for any other similar occurrences of this problem.

#### b. Flare Monitoring

In comments on the 2002 draft permits, Commenters noted that certain flaring events at the refineries that may violate SIP opacity limits are not being monitored. The District only requires visible inspection of flaring events that last longer than 15 minutes, with visual opacity inspection within an hour of the event. However, the District's opacity rule sets limits that should not exceed more than 3 minutes in any hour. *See* BAAQMD Regulation 6. Thus, flaring events that last less than 15 minutes may violate opacity, but will not be monitored. The District's response to our comment is vague. It states: "A flaring event that lasts less than 15 minutes has already been corrected. It is conceivable that repeated short flaring events could be a problem that evades detection. It is uncertain whether such events are common or constitute a significant source of emissions. However, the new flare monitoring rule will provide data to decide if this is a real problem, and appropriate steps can then be taken." *See* Dist. Resp. Comments, § 6.VII. at 59.

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[23] Examples of sources at the Avon Refinery that have opacity and FP limits are: the catalyst fines hopper at the FCCU, (S-99), the sandblasting operation (S-781), the coke storage pile, (S-821), fluid coker (S-806), and the sulfur collection pit (S-1405).

As Commenters stated in prior comments, however, a flaring event that lasts between 3 and 15 minutes could exceed opacity limits, and this type of violation would go unmonitored under existing permit monitoring requirements. The District implies that opacity limitations need only be monitored if the emission is "significant" or is "a real problem." The District's opacity regulation does not allow for these exemptions from its requirements.

**c. Pressure Release Valves**

Commenters previously noted that refinery workers have reported that pressure relief valve liftings occur frequently at the refineries without being reported to the District. The draft Refinery Permits should include requirements to install certain "tell-tale" indicators (e.g., simple flag devices that pop up and stay up when a valve opens) for every pressure relief valve. In addition, we urged recordkeeping and reporting requirements for every occurrence of a tell-tale indicator. The District should require newer devices now available that can monitor additional parameters such as pressure and flow, and the District should require more frequent inspections. (This issue was apparently identified in a District staff report long ago, but never rectified.)

COMMENT 27

COMMENT 28

COMMENT 29

In response to our comments, the District stated that it reviewed the monitoring for this source category in 1998 during rulemaking for BAAQMD Regulation 8-28. "Based upon this review, the District believes the monitoring requirements are adequate. All of the suggestions offered on the draft permits were made, considered, and rejected for technical, cost-related, or other reasons, during the Rule development process. It has proven difficult to devise monitoring of pressure relief valves in a way that yields meaningful compliance data at a reasonable cost." *See* Dist. Resp. Comments, § 6.VII. at 61.

It is difficult to understand why the monitoring Commenters requested has been rejected by the District. In fact, the South Coast Air Quality Management District ("SCAQMD") has promulgated Rule 1173 in which tell-tale indicators and other electronic monitoring devices are required monitoring for PRVs. Specifically, SCAQMD Rule 1173 provides for the following types of monitoring for pressure relief devices ("PRDs"):

> "(1) The operator shall monitor atmospheric PRDs located on process equipment by one of the following options:
> (A) Install tamper proof electronic valve monitoring devices capable of recording the duration of each release and quantifying the amount of compounds released on twenty percent of the atmospheric process PRD inventory, with at least one in each crude distillation unit, coker unit and fluid catalytic cracking unit. The operator shall install the electronic valve monitoring devices during the first turnaround after December 31, 2003; or
> (B) Use of electronic process control instrumentation that allows for real time continuous parameter monitoring, starting July 1, 2004, and telltale indicators for the atmospheric process PRDs where parameter monitoring is not feasible. The telltale indicators shall be installed no later than December 31, 2004."

Apparently, SCAQMD has concluded that meaningful compliance data can be obtained using various forms of monitoring, including tell-tale indicators, at a reasonable cost. We therefore

reiterate our comment that additional monitoring be required for PRVs in the permits for all five refineries. The District should also require monitoring of additional parameters such as pressure and flow and should require more frequent inspections.

Same as 27

Same as 28

Same as 29

**d. Leak Rates for Valves and Fittings**

Our previous comments noted that EPA inspections have found much higher leak rates for refinery valves (including for Bay Area refineries) than were reported by the refineries.[24] This is an indication that the current monitoring requirements are inadequate. In response, the District stated, "[f]rom a Title V standpoint, the monitoring is adequate. The District's air quality planning and rule development process are the appropriate method for reviewing and improving this particular monitoring requirement." Dist. Resp. Comments at 17.

EPA found an average leak rate of 5%, compared to 1.3% reported by these refineries. EPA estimated VOC emissions from unreported leaks at over 80 million pounds per year, including 15 million pounds of HAPs. Thus, on average, EPA monitoring found approximately *four times more* leaking valves than were being reported by the refineries. Given this information, the District has an obligation to provide a more detailed basis for its ~~decision not to require~~ additional monitoring. In particular, the District should provide sufficient justification that the current monitoring requirements in the Title V permits are, in fact, sufficient to identify at least the same level of non-compliance as was identified in the EPA study.

COMMENT 30

**e. Process Vessel Depressurization**

Our previous comments noted that there are no requirements in the draft Refinery Permits specifying monitoring or protocols for determination of the partial pressure of hydrocarbon gases in the vessels, necessary to show compliance with BAAQMD Regulation 8-10-301.4. In response, the District added the monitoring and recordkeeping requirement of 8-10-401 to the permit. BAAQMD Regulation 8-10-401 reads as follows: "Turnaround Records: Refinery personnel shall keep records of each process unit turnaround, listing as a minimum:

401.1 The date of unit shutdown and/or depressurizing,
401.2 The approximate process vessel hydrocarbon concentration when the organic emissions were first discharged into the atmosphere, and
401.3 The approximate quantity of total precursor organic compounds emitted into the atmosphere. These records shall be kept for at least two (2) years and be made available to the APCO during any compliance inspection.

It is unclear how this type of monitoring could ensure compliance with the requirements of section 301.4 of the rule, which states that organic vapors are to be contained and treated, "until the pressure within the process vessel is as close to atmospheric pressure as practicably possible, in no case shall a process vessel be vented to the atmosphere until the partial pressure of organic compounds in that vessel is less than 1000 mm Hg (4.6 psig)." BAAQMD Regulation 8-10-

[24] *See* "Oil Refineries Fail to Report Millions of Pounds of Harmful Emissions," U.S. Representative Henry A. Waxman, November 1999 (*available at* http://reform.house.gov/min/pdfs/pdf_inves/pdf_enviro_oil_refine_rep.pdf).

301.4. The permit conditions define an acceptable partial *pressure* of organic vapors and thus require a measurement of both vapor phase organic concentration *and* tank pressure. This should be corrected. COMMENT 31

**f. Tanks**

Our previous comments noted that tanks are exempt in Section VII of the draft Refinery Permits from monitoring under BAAQMD Reg. 8-5 based on their grouping as low vapor tanks, and that, at a minimum, the permits should require periodic monitoring to assure compliance. In response, the District stated that the requirement contained in BAAQMD Regulation 8-5-117 that is applicable to these tanks – i.e., that the vapor pressure of material stored be less than 0.5 psia – has been added to the appropriate tables in the permits. In addition, the District stated that vapor pressure monitoring has been added, with a frequency of P/E. Please ensure that these revisions have been made in all five of the draft Refinery Permits. COMMENT 32

## III. Other Source Specific Issues

In this section, we reply to District responses on specific issues that we raised in our 2002 Refinery Comments. In providing further input on these issues we note that, in some cases, our recommendations are valid for all five of Refinery Permits, including those of the Chevron and Rodeo Refineries.

In part A, we comment upon specific District responses to 2002 public comments on the 2002 drafts of the Refinery Permits. The comments are organized in the following manner. The public's 2002 comments at issue are excerpted below from the District's Response to Comments, which in many cases do not reflect the entire comment made by the public commenter. The District response is then placed in quotes followed by a reference to the page and/or paragraph number of the District document from which the response was taken. Finally, our supplemental comment is then provided in underlined text. In parts B, C and D of this section, we make comments on issues that arose in reviewing the current 2003 drafts of the Refinery Permits and Statements of Basis.

### A. Supplemental Comments

1. Comment [Martinez]: A high percentage of the emission estimates contained in the application seem to be in error and have underestimated the sources' PTE.

District Response: "In general, the emissions estimates contained in the applications were not useful for determining applicable requirements. Most source-specific applicable requirements do not base applicability upon potential to emit of particular equipment or operations. The comment does not assert any particular instance where an error in the application may have resulted in an applicable requirement being missed." *See* Dist. Resp. Comments at 11.

Supplemental Comment: We originally noted that the applicability of National Emission Standard for Hazardous Air Pollutant (NESHAP) standards to process units at the refinery frequently depends upon whether the PTE of a process unit exceeds emission thresholds specifically defined in the NESHAP. However, neither the applicant nor the District has

provided PTE calculations for sources that may be subject to a NESHAP triggered by a PTE. This is especially important for process units where the District believes that a unit may be exempt by virtue of having emission levels that are below the applicability thresholds defined in the regulation. Without determining the PTE of such sources, the District risks leaving out important federally required controls on process units at the facility.

The District is required to provide an adequate basis for its permit decisions. It is not the responsibility of public commenters to identify each instance where the calculation of a PTE is necessary to provide a sufficient basis to determine regulatory applicability. The facilities should have identified all potential requirements whose applicability depends upon the PTE of the source, and should have provided those PTEs in the permit application. We reiterate that according to 40 C.F.R. § 70.5(b), "[a]ny applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information." Failing this, the District now needs to develop the required PTE values as part of the statement of basis for the Title V permits at all five refineries. COMMENT 33

2. Comment [All Refineries]: The Statements of Basis needs to include process flow diagrams showing the how the sources, waste streams, and abatement devices are connected. Reviewers should not have to submit a Public Records Act request, go to the District office, and sift through the voluminous and disorganized permit and plant files in the hope of finding this type of information.

District Response: "Assembling this information would extremely resource-intensive. The comment does not explain why this information is needed to review the Title V permit. See discussion in Section IV, above, regarding the role of public review." *See* Dist. Resp. Comments at 12.

Supplemental Comment: The District has a responsibility to allow for meaningful public review of proposed Title V permits. In order to fulfill this responsibility the District must prepare and make available information that can be used by the public to verify that the permit terms and conditions for a facility are correct. This includes process flow information. In the one case in which Commenters were able to locate a detailed process flow diagram for one portion of the Benicia Refinery, we were able to use this information to correct an error in the proposed permit. In particular we found that the District had incorrectly stated that devices A-1 through A-5 abated source "S-34," and that the District had failed to indicate that a number of other sources were abated by these control devices. Had we and other members of the public obtained easy access to additional information of this type, it is likely that we would have been able to identify additional problems in the permits for all the refineries. COMMENT 34

3. District Response: "The equipment tables have been revised relative to those found in the draft permits. Table II-A lists all PERMITTED sources, and provides equipment capacity information where that information is available and relevant. Table II-B lists all EXEMPT equipment that has been assigned a District permit number for reference." *See* Dist. Resp. Comments at 12.

Supplemental Comment: We have checked the updated draft permits for the Benicia, Martinez, and Avon Refineries, and it appears that the Martinez Refinery Permit is still missing an exempt equipment table. Please ensure that exempt equipment tables are placed in all of the Refinery Permits including the Martinez, Chevron, and Rodeo Refineries. COMMENT

4 Comment [All Refineries]: Diesel back-up generators should be listed in the Permits

District Response: "The permit lists have been updated to include all sources with District identification numbers, including Diesel engines." *See* Dist. Resp. Comments at 13.

Supplemental Comment: Upon review of the current draft Refinery Permits, it appears that diesel backup generators are still not listed in the Martinez and Avon Permits. Please correct this omission for all five Refinery Permits. COMMENT 36

5. Comment [All Refineries]: The permit should have an index linking specific sources and abatement devices to pages containing information about the specific sources and abatement devices. The permit should also have an index for permit conditions and a more detailed table of comments.

District Response: "These are good suggestions for enhancing the permit. Current time constraints prevent implementation at this time. The District will consider implementing them at some future date." *See* Dist. Resp. Comments at 21.

Comment [All Refineries]: The formatting of the table titles makes it difficult to easily ascertain the sources covered by each table.

District Response: "None at this time. Current time constraints prevent implementation at this time. The District will consider the suggested format improvements at some future date." *See* Dist. Resp. Comments at 21.

Supplemental Comment: The District should implement these changes for the final permits for all refineries, as this inhibits effective review of the permit. Permit usability would be greatly enhanced by the suggested changes. COMMENT 37

6. Comment [Martinez]: The MRC reduced NOx from the CO Boilers to generate IERCs to meet Reg. 9-10 in Application 18185. The modifications reduce the availability of oxygen in the initial combustion zone to inhibit NOx conversion. However, they also simultaneously increase CO concentrations due to lowered oxygen levels. The District's criteria pollutant emission inventory for 1993 to 2001 indicates that these modifications increased CO emissions from about 48 ton/yr prior to 1999 to about 469 ton/yr in 1999 and thereafter, or by nearly a factor of ten.

District Response: "The comment appears directed at whether the Shell refinery is complying with its Regulation 9, Rule 10 limit. It is not clear how the commenter intends that this comment, assuming it is correct, should be addressed in the Title V context. Nevertheless, the District has considered the substance of the comment and responds below.

One of the "fuels" that is combusted in the CO Boilers is the exhaust from the Fluid Catalytic Cracking Unit (FCCU, S-1426), which contains an appreciable amount of carbon monoxide (approximately 8 to 9%, by volume). Carbon monoxide (CO) is the product of incomplete combustion and can be further burned to completion, yielding carbon dioxide (CO2) and useful energy. Rather than wasting the energy contained within the CO exhaust from the FCCU and emitting large amounts of CO in the process, the refinery burns the CO in one of 3 CO Boilers. CO emissions from the 3 CO Boilers (S-1507, 1509 & 1512) are calculated based on reported fuel use multiplied by an emission factor. The District has historically used an emission factor of 0.035 pounds of CO emitted per 1000 cubic feet of CO burned as fuel. The apparent increase in CO emissions that occurred in 1999 was caused by a change in the way the refinery reported CO fuel usage from the FCCU to the CO Boilers. Prior to 1999, Shell reported only the portion of the exhaust from the FCCU that was actually carbon monoxide, which was approximately 8-9% of the total exhaust stream from the FCCU. Starting in 1999, Shell began reporting the entire exhaust stream from the FCCU as CO fuel to the CO Boilers. This resulted in an approximately 10-fold increase in reported fuel usage, even though the "CO" portion of the FCCU exhaust did not change. The District did not correct the emission factor to compensate for the change in reporting, so the calculated CO emissions increased by a factor of 10. This is a calculation error, and not an increase in real emissions.

District staff has reviewed source test data for the 3 CO Boilers for the period 1994 – 2002. Actual CO emissions from the CO Boilers averaged 6.0 lb/hr for the period 1994 – 1998. For the period 1999 – 2002, the average CO emissions from the CO Boilers were 5.2 lb/hr. Based on this data, CO emissions have actually decreased slightly since 1999.

To correct this problem for subsequent years, the District will revise the emission factor that is used to calculate CO emissions from the CO Boilers. The new CO emission factor of 0.00184 lb CO per 1000 cubic feet of CO fuel has been calculated from the average emissions of 5.2 lb/hr and the average CO fuel (reported as total exhaust from the FCCU) for calendar years 1999-2001." *See* Dist. Resp. Comments at 22-23.

Supplemental Comment: Please provide further information regarding the reported 2000 inventory increases in Martinez Refinery CO-boiler emissions of NOx and SOx. Please provide further information and analysis regarding the reported inventory increases in 2000 NOx emissions from the Valero refinery CO boilers, as well as, the replacement of several large components of the FCCU (S-5) that may have taken place shortly before the apparent emissions increases. *See* 2002 Benicia Refinery comment letter, § 21. Please also provide further information regarding possible 1999 increases in NOx at S-901, S-903, and S-904 at the Avon Refinery, as well as, on the reported boiler modernization project that the Avon Refinery began in January 1997. *See* 2002 Avon Refinery comment letter §§ 2(c)(iii) & 2(c)(iv). Please verify whether the District inventory data for these sources is correct or in error and please verify whether the purported modifications to the noted sources were correctly permitted by the District.

COMMENT 38

7. Comment [All Refineries] (Regarding regulation of equipment leaks at refineries): All components should be identified according to their respective source number and component group to facilitate use of the Permit Tables and ensure compliance.

District Response: "There are over a hundred thousand components in each refinery. Listing each in the permit is beyond the District's resource abilities, would overwhelm the reader with detail, and would likely add nothing to the enforceability of applicable requirements. Title V does not require the permit to describe every source. It requires the permit to list all applicable requirements. Sources are described to the extent appropriate so that compliance with the requirements can be verified. The District exercises its judgment in this respect." *See* Dist. Resp. Comments at 24.

Comment [Martinez]: Numerous tables do not provide the source names or numbers for sources subject to the various requirements listed therein. For example, Table IV-DP in the Martinez Permit lists applicable requirements for "Subpart GGG Equipment and Components" but does not state which equipment and components at the facility are covered by Subpart GGG or other listed rules.

District Response: "Subpart GGG applies to thousands of fittings throughout each of the refineries. It is impossible to "state which equipment and components" are covered. Instead, Table IV-DP describes a blanket condition that applies to all relevant sources at the facility. The result of this approach is to place the burden on the facility to demonstrate that the standard is not applicable to a specific fitting, if a violation of the standard is detected. Unfortunately, this is the only practical approach for a sweeping rule that affects thousands of individual components." *See* Dist. Resp. Comments at 30.

Supplemental Comment: NSPS Subpart GGG defines an affected facility as the group of all the equipment within a process unit. Therefore the Martinez Refinery Permit should, at a minimum, identify the process units that contain Subpart GGG equipment. This would be consistent with the Benicia and Avon Refinery Permits, each of which contains a table listing process units that contain fugitive sources. *See e.g.* Benicia Refinery Permit Table IV-X. Please make all five Refinery Permits consistent along these lines.

COMMENT 39

8. Comment [All Refineries]: The tables should include information on the type and quantity of fuel used in all combustion sources. This information is required as part of the basis for various permit conditions placed upon the sources.

District Response: "Information that is part of the basis for permit conditions is not required to be included in the permit. The permit is required to contain the applicable requirements themselves." *See* Dist. Resp. Comments at 24.

Comment [Martinez]: Table II-A should include information on the type and quantity of fuel used in all combustion sources. This information is required as part of the basis for various permit conditions placed upon the sources.

District Response: "The District disagrees. Information such as this, that may be relevant to determining applicability of requirements, does not belong in the permit. The permit must reflect the applicable requirements themselves." *See* Dist. Resp. Comments at 26.

Supplemental Comment: We addressed this issue in our comments on the 2002 draft Benicia and

Martinez Refinery Permits. However, our point is a general one, and we now extend this response to all five Refinery Permits. According to 40 C.F.R. § 70.7(a)(5), every Title V draft permit must be accompanied by a "statement that sets forth the legal and factual basis for the draft permit conditions." We understand this to mean that the information upon which the permit conditions are based should to be located either in a statement of basis or the permit or both. In the case of the draft Benicia and Martinez permits, there are cases in which the required information is located in neither document.

For example, in the current draft of the Benicia permit, the process capacity and process throughput for source S-6 (coker burner) are provided in Table II-A, but no information is given on the quantity of fuel that this source uses. Yet in Table VII-A5, the District states that S-6 is exempt from monitoring for hazardous air pollutants ("HAPs") under 40 CFR § 63.644 because "large heaters are exempt from monitoring." *See* Benicia Refinery Permit, p. 518. The problem is that the District has nowhere determined the basis for this exemption from the federal regulation, which would be that the burner has a design heat input capacity of 44 megawatts or greater.

COMMENT 40

9. Comment: Many abatement devices have no limits or efficiency parameters listed. The District should define limits and efficiency parameters for all abatement devices at the refinery

District Response: "The District has added appropriate limits where there is a legal basis for doing so. Title V does not provide the authority for blanket imposition of new efficiency requirements." *See* Dist. Resp. Comments at 24.

Supplemental Comment: Please ensure that all available limits and efficiency parameters are included in all five Refinery Permits.

COMMENT 41

10. Comment [Martinez]: Table II-A is missing a column for throughput data

District Response: "The District assumes the reference in the comment to "throughput data" is data of actual throughput reported by a facility. Reported data is not a permit condition, and does not belong in the permit." *See* Dist. Resp. Comments at 26.

Supplemental Comment: By "throughput data" we meant that the permits should include information such as presented in the Benicia Refinery Permit, Table II-A, which includes a column that provides "throughput" information for each source. Table II-A of the Martinez and Avon Refinery Permits should be revised accordingly. Our suggestion for including throughput information in Table II-A also goes for the Richmond and Rodeo refinery permits.

COMMENT 42

11. Comment [Martinez]: Of the 81 abatement devices listed in Table II-B, 78 devices are missing operating parameters. Please list all existing operating parameters. Also, if any of these devices are not currently limited by any operating parameters, the District should impose such parameters for all abatement devices. This will help assure compliance with federal regulations, and is especially important in light of the facility's ongoing problems with compliance. In addition, 43 of these devices, including various scrubbers, carbon absorbers, and the flares have no limits or efficiency parameters listed. The District should define limits and efficiency

parameters for all abatement devices at the refinery.

District Response: "The "operating parameters" are applicable requirements and are listed in Tables IV and VII, not in Table II. To the extent the comment is suggesting that the District must establish operating parameters where none exist, this is not the function of Title V. The exception (when Title V does authorize establishing parameters) is where periodic monitoring is required and where parameters may be used to meet that requirement." *See* Dist. Resp. Comments at 26.

Supplemental Comment: Table II.C-Abatement Devices, of the Benicia Refinery Permit should be used as a good example of providing useful information in the table column for operating parameters. Please make all the Refinery Permits consistent with the Benicia Permit, Table II.C. — COMMENT 43

12. Comment [Martinez]: According to the District's 2001 inventory, a number of tanks have VOC emissions that exceed 2 TPY. They are therefore "significant" sources, as defined in 2-6-239, and should have been listed in Table II.

District Response: "The District is investigating this issue, and will amend the permit appropriately after the investigation is complete. However, as discussed above, the emissions inventory is a tool used for planning purposes, and is not necessarily an accurate tool for determining emissions from a particular source." *See* Dist. Resp. Comments at 26.

Comment [Martinez & Valero]: Those tanks with emissions in excess of 5 TPY also require permits, pursuant to BAAQMD Regulation 2-1-319.1.

District Response: "The District is investigating this issue, and will incorporate the results into future permits, if necessary. See the preceding response regarding the emissions inventory." *See* Dist. Resp. Comments at 26 & 27.

Supplemental Comment: We recommend that the District complete an investigation along these lines for all five Refineries, and ensure that all significant sources at the Refineries are correctly reported in the draft Refinery Permits prior to finalizing the permits. — COMMENT 44

13. Comment [All Refineries]: Section 112(j) requires refineries to submit an application for case-by-case MACT determinations for any categories where EPA has missed the deadline (the MACT hammer).

District Response: "Each of the facilities is in compliance with this requirement. The requirement to meet future milestones has been added to the generally applicable requirements section (Section III)." *See* Dist. Resp. Comments at 33.

Supplemental Comment: It appears that MACT hammer milestones have not yet been placed into the Section III of the Martinez, Benicia, or Avon Refinery Permits. Please make the appropriate revisions to these permits as well as those of the Richmond and Rodeo refineries. — COMMENT 45

14. Comment [All Refineries]: Subpart UUU requirements have not been incorporated into the permit.

District Response: "Subpart UUU has a future effective date of April 11, 2005. The refineries have not yet submitted permit applications indicating their compliance strategies. Since the compliance strategies are not yet known, Subpart UUU has been cited at the subpart level in the Section IV tables for each affected source instead of using the customary detailed citations." *See* Dist. Resp. Comments at 33.

Supplemental Comment: It appears that this suggestion has only been implemented in the Martinez Refinery Permit. Please add Subpart UUU language to Section IV of the other Refinery Permits as appropriate.

COMMENT 46

15. Comment [All Refineries]: The emissions from the flares must be monitored to assure compliance with Regulation 8. The District seems to be improperly exempting flares from SIP Regulation 8-2, presumably because the SIP Regulation 8-2-110.3 exempts "[a]ny operation or group of operations which are related to each other by being part of a continuous process, or a series of 8, Rule 2 or Rule 3, and for which emissions of organic compounds are reduced at least 85% on a mass basis." If this is the case, the exemption is inappropriate because, in practice, flares do not appear to achieve the required 85% destruction efficiency on a consistent basis. Therefore, the District should either regulate flares under Regulation 8-2 or develop a monitoring procedure that can verify a greater than 85% destruction efficiency at refinery flares and to have at least 90% of the organic carbon oxidized to carbon dioxide.

District Response: "Flares are not subject to Regulation 8-2 because they are control devices controlling emissions from process vessels, which are subject to other regulations (e.g., 8-10 and 8-28). Regulation 8-2 applies to sources that have not been addressed by other regulations. Though the District agrees that it would be useful to monitor control efficiency from flares, the technical barriers to doing so are considerable. There is no established means for routinely monitoring the control efficiency of refinery flares. The District will continue to consider this issue as technical understanding progresses." *See* Dist. Resp. Comments at 34.

Comment [All Refineries]: The Miscellaneous Operations regulation requires that sources without set standards must meet a 15 lb/day limit. *See* BAAQMD Reg. 8-2-301. This rule applies to Flares (which have no set emission limit in the District's regulations), and other sources as well, but apparently is not currently being enforced by the District. During some periods, the District was applying this rule to such sources. The Title V permit does not currently list these sources as subject to the 15 lb/day limit. Flares (discussed above) only list throughput limits and efficiency, but do not list explicit emissions limits. This limit should be added to the flare sections in the Title V permit, and also explicitly identified as applying to Pressure Relief Valve (PRV) liftings.

District Response: "Emergency flares are not subject to Regulation 8, Rule 2. Flares are abatement devices controlling emissions from controlled releases from process units, which are subject to Regulation 8-10 (Process Vessel Depressurization) and Regulation 8-28 (Episodic Releases). Because flare emissions are limited by these other regulations, flares do not meet the

definition of "miscellaneous source" contained in Regulation 8-2-201." *See* Dist. Resp. Comments at 35.

Supplemental Comment: Regulation 1-219 defines an "operation" as "[a]ny physical action resulting in a change in the location, form, or physical properties of a material, or any chemical action resulting in a change of the chemical composition, or chemical or physical properties of a material." Since flaring is a chemical action resulting in a change of chemical composition and physical properties of organic gases, therefore flares are an operation. Regulation 8-2-201 defines a miscellaneous operation as "[a]ny operation other than those limited by the other Rules of this Regulation 8 and the Rules of Regulation 10." Regulation 8-10 (process vessel depressurization) allows for flaring of organic vapors but does not place any limitation on the emissions from flares, whether by placing limitations on destruction efficiency or otherwise.

The flaring of emissions from process vessel depressurization appears to be a miscellaneous operation that is subject to Regulation 8-2, unless the District can show that such flares qualify for an exemption under SIP Regulation 8-1-110.3. This latter regulation exempts "[a]ny operation or group of operations which are related to each other by being a part of a continuous process, or a series of such operations on the same process material, which are subject to Regulation 8, Rule 2 or Rule 4, and for which emissions of organic compounds are reduced at least 85% on a mass basis."

Therefore, the District should either regulate the flaring of process vessel depressurization emissions under Regulation 8-2 or else develop a monitoring procedure that can verify a greater than 85% destruction efficiency for these types of flares. In addition, in order for these flares to qualify for an exemption under Regulation 8-1-110.3, a test method will need to be developed to verify that "at least 90% of the organic carbon shall be oxidized to carbon dioxide." ] - COMMENT 47

16. Comment [All Refineries]: The tables discussing the flares do not apply an applicable requirement: 40 C.F.R. § 60.18. Moreover, no monitoring has been designed to assure compliance with 40 C.F.R. § 60.18.

District Response: "This comment is correct only for the draft Valero permit Tables IV and VII have been corrected." *See* Dist. Resp. Comments at 34.

Supplemental Comment: We could not find this correction in the current draft of the Valero Refinery Permit. Please check to see if it has been carried out. ] - COMMENT 48

17. Comment [All Refineries]: The refinery cooling towers should be subject to Regulation 8-2-301 until the District adopts a formal RACT rule addressing the serious problem with cooling tower VOC emissions.

District Response: "The District has examined this issue and has concluded that the cooling towers are subject to Regulation 8-2-301. The District has determined that the cooling towers are in compliance because the concentration of precursor organic compounds is much less than 300 ppm total carbon on a dry basis. This conclusion is based on use of the AP-42 factor for organics in refinery cooling towers. The detailed calculations have been included in each

statement of basis." *See* Dist. Resp. Comments at 36.

Supplemental Comment: Source testing should be required for refinery cooling towers at all refineries. The AP-42 emission factor for VOCs from refinery cooling towers is rated "D" meaning the quality of this factor is below average. The emission factor for PM10 from cooling towers is rated "E" or of poor quality. Source tests should also include determination of air and water circulation rates in the cooling towers.

COMMENT 49

18. Comment [All Refineries] (Regarding storage tank exemptions at all refineries): Merely indicating that SIP Regulation 2-1-123 is the basis for exemption does not provide adequate information for public or regulatory reviewers since this rule allows exemptions on multiple physical and circumstantial grounds. This claimed exemptions should be included in the permit application with a clear factual basis for the requested exemptions before the permit is issued in order for the public and regulators to conduct a reasonable inquiry into the basis of such claimed exemptions.

District Response: "A table has been added to each statement of basis listing all exempt sources that have District source numbers, and the basis for the exemption." *See* Dist. Resp. Comments at 36.

Supplemental Comment: We note that the Benicia SB contains such a table with citations to the specific regulations exempting the source, where applicable. However, the Avon SB is missing an exempt source table. The Avon Refinery Permit includes an exempt source table but this table does not provide detailed citations such as is provided for the Benicia Refinery Permit. The Martinez SB also contains an exempt sources table that cites specific exemptions. However, the exempt source table for Martinez is missing "make/type," "model," and "capacity" information. Please ensure that the exempt source tables are consistent amongst all the refinery SB's including the Chevron and Rodeo permits. Please include specific citations for exemptions and information on make, model, and capacity.

COMMENT 50

19. Comment [All Refineries]: The requirement to inspect primary rim seals for internal floating roofs once every 10 years is not adequate; it means that a tank may not be monitored for the entire 5-year period covered by the Title V permit.

District Response: "The once-per-ten year inspection requirement reflects the District's judgment that emissions from landing, evacuating, and inspecting internal floating roof seals would exceed any potential emission reductions gained from discovery of worn seals. This inspection requirement strikes an appropriate balance aimed at maximizing emissions reductions." *See* Dist. Resp. Comments at 37.

Supplemental Comment: Please provide, as part of the Statement of Basis, calculations and data supporting the District's opinion regarding the emissions trade-off related to a more a monitoring frequency that is more frequent than 10 years.

COMMENT 51

20. Comment [All Refineries]: The tank tables are missing federal enforceability determinations

District Response: "This has been corrected." *See* Dist. Resp. Comments at 50.

Supplemental Comment: A review of the Avon Refinery Permit indicates that the federal enforceability determinations have not yet been indicated for storage tanks in Table VII. Please correct this omission for the Avon Refinery Permit. Also please check the other Refinery Permits for this problem and correct where necessary. COMMENT 52

21. Comment [All Refineries]: The general provisions of 40 C.F.R. Part 60, Subpart A are applicable, including the monitoring provisions of 40 C.F.R. § 60.8 and 40 C.F.R. § 60.13 and the control device requirements of 40 C.F.R. § 60.18 (and the nearly identical control requirements of 40 C.F.R. § 63.11).

District Response: "Applicable requirements contained in the general requirements are addressed in the general refinery tables." *See* Dist. Resp. Comments at 58.

Supplemental Comment: It appears that the District response pertains only to the Avon and Benicia Refinery Permits, each of which includes a table for general refinery permit conditions. However, the Martinez Refinery Permit does not include such a table. Please add a table to the Martinez Refinery Permit that includes general refinery permit conditions. Please also make the Chevron and Rodeo Refinery Permits consistent with this permit format. COMMENT 53

22. Comment [All Refineries]: Where the subsumed regulation is a District regulation, the permit shield should state whether the subsumed regulation is SIP-approved or state only.

District Response: "The District will consider this suggestion for possible incorporation into future permits." *See* Dist. Resp. Comments at 70.

Supplemental Comment: Please incorporate this recommendation into the final Refinery Permits. COMMENT 54

23. District Response (Flares): "Most organizations submitting comments on these refinery permits also participated in the refinery flare monitoring rule. Accordingly, the District decided to defer questions of whether to imposition of new monitoring requirements until the rulemaking process was completed. The Title V permits will therefore require monitoring of flares that complies with existing requirements, and will be modified at a future time to include the requirements of the flare monitoring rule." *See* Dist. Resp. Comments at 58.

Comment: Commenters were able to locate Regulation 12-11 monitoring requirements in the Martinez and Avon Refinery Permits but could not find these in the Benicia Refinery Permit. Please make sure that Regulation 12-11 requirements are placed into the permits for all five refineries.[25] COMMENT 55

[25] The District has authority under federally approved BAAQMD Regulation 2-1-403 to add flare monitoring requirements equivalent to those of Regulation 12-11 into the Title V permit. "The APCO may require the installation of devices for measurement or analysis of source emissions or ground-level concentrations of air contaminants." SIP Reg. 2-1-403.

**B. Additional Monitoring Comments**

1. Monitoring for diesel backup generators: The Benicia SB indicates that the federally enforceable opacity limits for diesel backup generators, S240, S241, and S242 require no monitoring, "because the source will be used for emergencies and reliability testing only." *See* Benicia SB at 22. This is not a valid reason for omitting opacity monitoring. Please include appropriate monitoring for diesel backup engines at the Benicia Refinery and for all other Refinery Permits. COMMENT 56

2. Process upset indicators in place of actual opacity monitoring: The Benicia SB indicates that Sources 157, 160, 167, 168, 174, and 175 need no monitoring because the "source is capable of exceeding visible emissions or grain loading standard only during process upset. Under such circumstances, other indicators will alert the operator that something is wrong." *See* Benicia SB at 21. The problem with the District's reasoning is that while process upset may indicate the possibility of exceeding a limitation, it does not provide a clear indication of compliance or non-compliance. Therefore without opacity monitoring, the opacity limitations will remain unenforceable. The District should require some form of monitoring in these instances at the Benicia Refinery, and should also make similar changes to the other refinery permits, where appropriate. COMMENT 57

3. Monitoring for sources burning liquid fuels: The Martinez SB proposes "visual inspection" monitoring for grain loading limitations at a number of sources that that burn liquid fuels. *See* Martinez SB at 60. The SB states that "adequate monitoring for combustion of liquid fuels is a visible emissions inspection after every 1 million gallons diesel combusted, to be counted cumulatively over a 5 year period." *Id.* It is unclear whether this means that a visual inspection should be completed at least once in 5 years. Please revise this language such that the SB and the permit clearly indicate that monitoring is required at least once every 5 years. Please carry out similar revisions for all the Refinery Permits. COMMENT 58

4. Particulate matter ("PM") monitoring at the Avon Refinery: The Avon SB proposes no monitoring for opacity and particulate emissions limitations at Sources 806 (Coker), 810 (Coke loading), and 821 (Coke pile) because emissions from these sources, "are expected to be negligible." " *See* Avon SB at 34 & 35. However, a review of the District inventory for these sources indicates that they emit large quantities of PM. For example, according to the District inventory, Source 810 emitted about 30 tons of PM in 2001. Source 821 emitted about 6 tons and Source 806 about 100 tons of PM during the same year. Given these large potential PM emissions regular PM monitoring is necessary for these sources. We also request that the District impose monitoring for all high emitting coke operations at the other Bay Area refineries. COMMENT 59

5. Visible particulate fallout: The Avon SB indicates no monitoring for limitations on visible particulate fallout (SIP Regulation 6-305). *See* Avon SB at 35. The District states that, "no monitoring is proposed for the property belonging to others." *Id.* While Commenters recognize that there could be difficulties in monitoring private properties near a permitted facility, the facility could nonetheless monitor its property boundaries as well as public property next to the facility, such as public roads. Please add additional monitoring to all the refinery permits along COMMENT 60

these lines in order to insure compliance with Regulation 6-305

### C. Specific Monitoring Comments

We note the specific comments below were included in our 2002 Comments, but were not addressed by the District.

#### 1. Martinez Refinery

a. Table VII-G includes monitoring requirements for several asphalt storage tanks. *See* Draft Martinez Title V Permit, page 518. However, no monitoring is proposed to demonstrate compliance with SIP Regulation 6-301 (opacity limits). According to 40 C.F.R. § 70.6(c)(1), a Title V permit must include, "monitoring, reporting, and recordkeeping requirements sufficient to assure compliance with the terms and conditions of the permit." Thus, the District must include monitoring requirements for these tanks sufficient to assure compliance with the applicable regulations. ] COMMENT 61

#### 2. Avon Refinery

a. Table VII-A, page 738: Please correct the table to show that BAAQMD Regulation 8-7-313.1, 8-7-313.2, 8-7-313.3 are federally enforceable. ] COMMENT 62 In addition, compliance with Title V requires monitoring to verify that VOC fugitive emissions, spillage, and retention and spitting are within the defined limits, and therefore additional monitoring requirements should be imposed. ] COMMENT 63

b. Table VII-A, pages 790-791, includes no monitoring to assure compliance with the sulfur dioxide and ammonia limits of BAAQMD Regulation 9-1-313.2 (sulfur removal operations at petroleum refineries). Monitoring should be included to ensure compliance with these limitations. ] COMMENT 64

c. Table VII, page 750, contains organic vapor emission limits for S-815, 816, and 817 (feed preparation and crude units). The monitoring frequency is incorrectly listed as no monitoring. Please correct this error. ] COMMENT 65

d. Table VII-A, page 757: Please correct the table to show that BAAQMD Regulation 8-16-501 is federally enforceable. ] COMMENT 66

e. Table VII-A, page 758, includes a monitoring frequency stated as "N or C." The ambiguous meaning of this table entry should be clarified in the table and in the Statement of Basis. ] COMMENT 67 Further, we object to the lack of monitoring requirements. BAAQMD Regulation 6-304 states that "an opacity sensing device in good working order" should be used to determine opacity in this situation. ] COMMENT 68

Table VII-A, page 792: Please correct the table to show that BAAQMD Regulation 9-1-309 is federally enforceable. ] COMMENT 69

g. Table VII-Clusters, pages 797 to 862: This section of the table generally refers to storage tank limits and monitoring requirements. The table is missing federal enforceability determinations on every page. Please indicate that the BAAQMD Regulations for sources covered in this section of the table are all federally enforceable. In addition, tanks covered by BAAQMD Regulations 8-5-311.3 and 8-5-328.2 have monitoring frequencies listed as "not specified." Please correct these errors. The monitoring frequency for these requirements should be on a per episode basis.

COMMENT 70

COMMENT 71

**D. Permit Shield**

***i. Benicia Permit Shield***

1. Table IX B-23 (CEMS) on page 685 of the Benicia Permit states that 40 C.F.R. § 60.7 (c) and (d) may be subsumed by BAAQMD Regulation 1-522.8, because the BAAQMD rule satisfies the reporting requirements of the federal regulation. We disagree. SIP Regulation 1.522.8 states simply that "[m]onitoring data shall be submitted on a monthly basis in a format specified by the APCO. Reports shall be submitted within 30 days of the close of the month reported on." The SIP rule only allows the APCO to define the format of reporting.

In contrast, 40 C.F.R. section 60.7 (c) and (d) provide extensive and explicit reporting requirements, as indicated in the following excerpts:

> (c) Written reports of excess emissions shall include the following information:
> (1) The magnitude of excess emissions computed in accordance with Sec. 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.
> (2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
> (3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
> (4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.
> (d) The summary report form shall contain the information and be in the format shown in figure 1 unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.
> (1) If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in Sec. 60.7(c) need not be submitted unless requested by the Administrator.
> (2) If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the

reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in Sec. 60.7(c) shall both be submitted.

It is clear that the requirements of 40 C.F.R. § 60.7 are not "satisfied" by SIP Regulation 1-522.8. Therefore the permit shield proposed in Table IX B-23 must be removed from the permit. ] COMMENT 72

2. Tables IX B-7, IX B-8, and IX B-9 of the Benicia Permit propose permit shields for Sources 21, 22, and 220, claiming that Title V permit condition #10574-19 is satisfied by SIP Regulation 9-10-502. *See* Benicia Refinery Permit, p. 682-683. However, a comparison of the specific language of the permit condition indicates that the condition is more stringent. The permit condition states that the three sources shall be monitored,[26] "with a District approved continuous fuel flow monitor and recorder in order to determine fuel consumption." However, SIP Regulation 9-10-502.2 only requires, "[a] fuel-flow meter in each fuel line for each affected unit." Therefore, the proposed permit shields for permit condition #10574-19 should be eliminated from the Title V permit. ] COMMENT 73

3. Commenters also object to numerous proposed permit shields presented in Tables IX B-24 (Fugitives) and IX B-25 (Fugitives) on pages 685 through 688 of the Benicia Permit:

a. District Regulations 11-7-302 and 11-7-303 should not be subsumed by Regulation 8-18-303 because these Regulation 11 rules deal with a larger array of requirements than does Regulation 8-18-303. The latter rule only defines acceptable VOC concentrations and repair times. Rules 11-7-302 and 303 address monitoring frequencies and other issues in addition to repair times and VOC concentrations. ] COMMENT 74

b. District Regulation 11-7-307 should not be subsumed by Regulation 8-18-302 because 11-7-307 contains monitoring requirements, whereas 8-18-302 does not. Moreover, the monitoring requirements of Regulation 11-7-307 are more stringent than those of Regulation 8-18-401 and 404. ] COMMENT 75 ] 75a

c. The monitoring requirements of Regulations 11-7-307.3 and 307.4 are more stringent than those of Regulation 8-18-404, and therefore this proposed permit shield should be eliminated from the permit. The monitoring requirements of Regulation 11-7-307.5 are more stringent than those of 8-18-401.3, and therefore this proposed permit shield should be eliminated from the permit. ] COMMENT 76

d. Regulation 11-7-308 contains a monitoring requirement and should not be subsumed by Regulation 8-18-304, which does not contain monitoring requirements. Furthermore, although Regulation 8-18 contains monitoring requirements at 8-18-401.8, these are neither as detailed nor as stringent as the monitoring requirements of Regulation 11-7-308. Regulation 8-18.401.8 states that, "[a]ny pressure relief device that releases to the atmosphere shall be inspected within 5 working days," whereas Regulation 11-7-308 ] COMMENT 77 ] COMMENT 78

[26] Note that there is a typo in permit condition #10574-19 such that the language of the condition does not form a complete sentence. However, the phrase "shall be monitored," is implied by the context of the condition and is assumed here for the purposes of this comment.

states that pressure relief devices, "shall be monitored within 5 calendar days after evidence of a potential lead is found by visual, audible, olfactory, or other detection methods." Therefore this proposed shield should be removed from the permit.

e. Regulations 11-7-310.2 and 310.3 are more stringent than Regulation 8-18-306.1, and therefore the permit shield for these regulations should be eliminated from the permit. ] Comment 79

f. Federal regulations 40 C.F.R. § 61.350 (a) and (b) should not be subsumed by District Regulation 8-18-306.1 because the federal regulations are more stringent than the District regulation. The federal regulation states that the delay of repairs is allowable "if the repair is technically impossible without a complete or partial facility or unit shutdown." However, Regulation 8-18-306 does not have a requirement that is as strong as technical impossibility. Please remove this permit shield from the Title V permit. ] Comment 80

g. A permit shield should not be allowed for federal regulations 40 C.F.R. §§ 60.482-7 (g) and 60.482-9 (e). District Regulations 8-18-404 and 8-18-306 that have been proposed as streamlined requirements are not as stringent as the federal regulations, in particular, with respect to monitoring. Please remove this permit shield from the Title V permit. ] Comment 81

*ii. Martinez Permit Shield*

1. Table IX A-3 on page644 of the Martinez Permit provides a long list of sources for which a permit shield from 40 C.F.R. § 60 Subpart Db is proposed. However neither the Permit or the Martinez SB provides an explanation of why these emission units are exempt from the federal regulation. The Martinez SB must include a source-by-source explanation of exemption in order to support the proposed permit shield. Otherwise the permit shield should be eliminated from the permit. ] Comment 82

2. Table IX A-11 on page 649 of the Martinez Permit proposes that source 4161 be shielded from 40 C.F.R. § 60.105 because the regulation, "is not applicable when source uses alternative monitoring in accordance with 60.13 (i)..." The latter regulation allows for alternative monitoring requirements based upon a written application and approval of the District. However, the SB does not provide any information related to the approved alternative monitoring requirements, and therefore there is insufficient basis to verify whether the alternative monitoring is equivalent or more stringent than the requirements of 40 C.F.R. § 60.105. Commenters request additional justification be placed into the statement of basis regarding this proposed shield. Otherwise the shield should be eliminated from the permit. ] Comment 83

*iii. Avon Permit Shield*

1. The Avon SB incorrectly states that the refinery has no permit shields. *See* Avon SB at 46. In addition, permit shield Tables IX B-1 through IX B-8 in the Avon Refinery Permit are missing either part or all of the description of streamlined requirements. Please correct these errors. ] Comment 84

2. Tables IX B and IX B-2 neglect to cite the entire streamlined requirement. Please remedy this oversight. comment 85

3. Tables IX B-3, IX B-4, IX B-5, and IX B-6 state that various Subparts of 40 C.F.R. § 60 are subsumed because the sources in the tables are "not newly constructed, reconstructed or modified." *See* Avon Refinery Permit at 879-880. This description in the permit shield is inadequate because it does not provide sufficient evidence that the source is exempt from the requirement in the C.F.R. For example, in Table IX B-3, 40 C.F.R. 60 Subpart J applies to any source constructed or modified after June 11, 1973. Nowhere in the Avon Refinery Permit is there an indication of the construction date of S-802 (FCCU: Fluid Catalytic Cracker). The permit shields in Tables IX B-3, IX B-4, IX B-5, and IX B-6 should, in the very least, be consistent with the Benicia Refinery permit shield which states that the source has not been modified after the applicable date in the C.F.R. requirement. *See* Benicia Refinery Permit, Table IX A-2, p. 680. comment 86

4. Table IX B-8 states that sources 854, 934, 944, 945, 992, 1012, and 1013 are exempt from the requirements of BAAQMD Regulation 8-2 because the sources are already governed by BAAQMD Regulation 10. *See* Avon Refinery Permit at 881. If these sources are subject to BAAQMD Regulation 10 (NSPS) the District should indicate the exact rule in Regulation 10 to which each source is subject to. We object to the shield unless the District can demonstrate that the sources in question are subject to Regulation 10. comment 87

## IV. Environmental Justice

As discussed throughout this letter, the District's draft Refinery Permits fail to assure compliance with all applicable requirements. As a result, issuance of the permits as drafted would have significant implications for environmental justice. For the reasons discussed throughout these comments, issuance of the Refinery Permits would violate Title VI of the federal Civil Rights Act of 1964, 42 U.S.C. § 2000d *et seq.*, California Government Code § 11135 and regulations promulgated there under, as well as state policies on environmental justice.

Poor communities and people of color face environmental injustice for a variety of reasons, in part because they are more likely to be exposed to pollution as they live close to facilities such as refineries and because they may be more sensitive to the effects of exposure to any one pollutant, due to a number of factors related to their socioeconomic status. Communities of color and poor people are not only more likely to be exposed to higher levels of numerous air pollutants, they may also be more sensitive to chemical exposures. Evidence from across California suggests that people of color and low-income communities face disproportionate exposure to air pollution and consequently, disproportionate health risks.

The District is mandated by federal and state civil rights laws to consider differences in susceptibility among various subgroups within the general population. For example, California law provides that the District must ensure "fair treatment"[27] with regard to air quality protection.

[27] Under the California Government Code, "'environmental justice' means the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies." Cal. Gov. Code § 65040.12(e).

Moreover, as U.S. EPA states:

> [T]here may be instances in which environmental laws do not regulate certain concentrations of sources, or take into account impacts on some subpopulation, which may be disproportionately present in an affected population. For example, there may be evidence of adverse impacts on some subpopulation (e.g. asthmatics) and that subpopulation may be disproportionately composed of persons of a particular race, color, or national origin. Title VI is concerned with how the effects of the programs and activities of a recipient are distributed based on race, color, or national origin.[28]

Furthermore, U.S. EPA, California EPA, CARB and the BAAQMD all have policies in place to address and ensure environmental justice.

A central component of environmental justice is ensuring that affected communities have an opportunity for meaningful participation in the decision-making process. Meaningful public participation means easy access to understandable information, early and active involvement and collaboration, an opportunity to participate in the public process, including an ability to voice concerns and have them fully considered and incorporated into the final outcome to the greatest extent possible. A public process that fails to include these steps is simply not meaningful participation. U.S. EPA's policy on environmental justice affirms this.[29]

As discussed above in Section II.E of this letter (Public Participation), the District failed to make relevant information available to the public and failed to fully explain its permitting decisions. As a result, the communities affected by the District's decisions have a limited ability to meaningfully participate in the Title V process. This results in environmental injustice.

comment 88

The District must not issue the Refinery Permits until compliance with all applicable requirements is assured by the terms and conditions of the permits. The District proposes to issue the permits without conducting a thorough review of the refineries' compliance records and without including appropriate compliance plans. The District's plan to issue the permits without assuring compliance with all applicable requirements—while deferring enforcement of non-compliance problems until some unspecified future point—is not only inconsistent with the Clean Air Act, but would result in environmental injustice to the communities surrounding the refineries.

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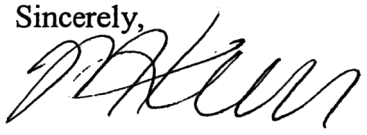
[28] *See* "Draft Revised Guidance for Investigation of Title VI Administrative Complaints Challenging Permit," Federal Register, Vol. 65, No. 124 (June 27, 2000) at 396.

[29] "Meaningful involvement means that: (1) potentially affected community residents have an appropriate opportunity to participate in decisions about a proposed activity that will affect their environment and/or health; (2) the public's contribution can influence the regulatory agency's decision; (3) the concerns of all participants involved will be considered in the decision making process; and (4) the decision makers seek out and facilitate the involvement of those potentially affected." (*See* U.S. EPA Environmental Justice Program, *available at* http://www.epa.gov/compliance/environmentaljustice/index.html).

## V. Conclusion

For the foregoing reasons, the draft Refinery Permits should not be finalized in their current form. Thank you for this opportunity to submit public comments. If you have any questions, please call Marcie Keever at 415-369-5351, Amy S. Cohen at 415-442-6656, or Ken Kloc at 415-369-5352.

Sincerely,



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cc: William Norton, BAAQMD APCO (*hand delivery only*)
Edward Pike, U.S. EPA Region 9

Response to GGU comments (9/22/03)

The District has prepared the following responses to the comments contained in this letter

Each comment consists of 1) a suggestion for action or change, and 2) the argument, if any, supporting the suggestion.

The comments identified by the District have been numbered. Refer to the attached copy of the original comment letter for the comment numbers.

| | Response |
|---|---|
| 1. | The argument supporting the suggested change is factually incorrect. No change has been made to the permit. The suggestion is based on the following incorrect assumption: that the District failed to review and address relevant complicance records. The District's review of recent NOV's failed to reveal any evidence of current ongoing noncompliance. The comment mistakenly considers documentation of individual incidents of non-compliance to require a determination of ongoing non-compliance. |
| 2. | The argument supporting the requested change is incorrect as a matter of law. No change has been made to the permit. A compliance schedule is required when the facility is currently (as of the date of issuance) out of compliance. The District's burden is to explaine why a facility's historical non-compliance equiates to *current* non-compliance. |
| 3. | The argument supporting the requested change is incorrect as a matter of law. No change has been made to the permit. See Consolidated Responses to Comments on Refinery Title V Permits (July 25, 1993) Section 3C. |
| 4. | The argument supporting the requested change is incorrect as a matter of law. No change has been made to the permit. See Consolidated Responses to Comments on Refinery Title V Permits (July 25, 1993) Section 3C. |
| 5. | The argument supporting the suggested change is factually incorrect. No change has been made to the permit. See response to Comment 1 |
| 6. | The argument supporting the suggested change is factually incorrect. No change has been made to the permit. The suggestion is based on the following incorrect assumption: that the District failed to review and address relevant complicance records. See response to Comment 1. |
| 7. | The argument supporting the suggested change does not provide sufficient information or analysis to support the change. The comment has not identified any relevant information that needs to be obtained from the refineries. No change has been made to the permit. |
| 8. | The argument supporting the suggested change is factually incorrect. No change has been made to the permit. The suggestion is based on the following incorrect assumption: that any of the refineries are currently in a state of ongoing non-compliance. |
| 9. | The argument supporting the suggested change is factually incorrect. No change has been made to the permit. The suggestion is based on the following incorrect assumption: that the grandfathered source throughputs contravene NSR limits. See Consolidated Responses to Comments on Refinery Title V Permits (July 25, 1993) Response 89. |
| 10. | The argument supporting the suggested change is factually incorrect. No change has been made to the permit. The suggestion is based on the following incorrect assumption: that the grandfathered source throughputs will permit major modifications. See Consolidated Responses to Comments on Refinery Title V Permits (July 25, 1993) Response 89. |
| 11. | No argument supporting this comment has been made. No change has been made to the permit. |
| 12. | The comment does not propose any changes to the permit. The comment does not identify a single instance where the definition used by the District is less restrictive than the SIP regulation 2-2-223. No change to the permit has been made. |
| 13. | The argument supporting the suggested change does not provide sufficient information or analysis to support the change. No change has been made to the permit. |
| 14. | The argument supporting the suggested change is factually incorrect. No change has been made to the permit. The suggestion is based on the following incorrect assumption: that the grandfathered source throughputs will permit a physical or operational change to the facility. See Consolidated Responses to Comments on Refinery Title V Permits (July 25, 1993) Response 89. |
| 15. | The comment suggests a change that clarifies or improves the permit, but cannot be made at this time. No change has been made to the permit. The District will consider incorporating the suggestion at a later date. |

Response to GGU comments (9/22/03)

| | |
|---|---|
| 16. | The comment suggests a change that clarifies or improves the Statement of Basis, but cannot be made at this time. No change has been made to the permit. The District will consider incorporating the suggestion at a later date. |
| 17. | The comment suggests a change that clarifies or improves the Statement of Basis, but cannot be made at this time. No change has been made to the permit. The District will consider incorporating the suggestion at a later date. |
| 18. | The comment suggests a change that clarifies or improves the Statement of Basis, but cannot be made at this time. No change has been made to the permit. The District will consider incorporating the suggestion at a later date. |
| 19. | The comment suggests a change that clarifies or improves the Statement of Basis, but cannot be made at this time. No change has been made to the permit. The District will consider incorporating the suggestion at a later date. |
| 20. | The suggested change corrects a mistake. The mistake has been corrected in the final statement of basis |
| 21. | The suggested change corrects a mistake. The mistake has been corrected in the final statement of basis. Permit Shield BAAQMD Condition 19177-38 for 40 CFR 60 Subpart Db 60.48b(e)(2) and (3) in SOB Table IX B - 10.1, S1030 and S1032 has been deleted. This table is now consistent with Table IX B - 10.1 in the Permit. |
| 22. | The suggested change should be implemented at this time. The change has been made to the permit, based upon the argument made in the comment. Monitoring has been added for S-99 requiring that the Permittee/Owner/Operator visually inspect the A-4 outlet for visible emissions. This new monitoring requirement appears in condition #19528 part 13 and in the monitoring table for S-99 in part 7 of the proposed Title V permit. The type of monitoring imposed is appropriate because S-99 is abated in series by A-4, a cyclone and a baghouse operated in series. With this abatement train, negligible particulate emissions and no visible emissions are expected at the A-4 emission point. The visible emissions monitoring will serve as a surrogate for monitoring for Regulation 6-310. |
| 23. | S-781 has been deleted from the proposed Title V permit since the Permit to Operate for this source has been cancelled. |
| 24. | The suggested change should be implemented at this time. The change has been made to the permit, based upon the argument made in the comment. Monthly monitoring has been added for S-821, the coke storage pile, for visible particulate requiring that the Permittee/Owner/Operator visually inspect S-821 for visible emissions. This new monitoring requirement appears in condition #19528 part 14 and in the monitoring table for S-821 in part 7 of the proposed Title V permit. This type of monitoring is appropriate because the coke particles are generally dense enough and large enough to remain situated at the coke pile during windy conditions and because the coke that is transferred to the pile is done so as a wet slurry with adequate water moisture to adequately ensure that the coke remains situated at the pile, even during windy conditions. |
| 25. | Though particulate matter is generated at S-806, there is no emission point to atmosphere at the S-806 (Coker). There are no particulate emission points to atmosphere at S-806, so Regulation 6-301, 6-305, and 6-310 have been stricken as applicable requirements for this source. The coke fines generated at S-806 are vented to S-903 where they are subjected to combustion. The exhaust from S-903 is abated by A-8, a two stage electrostatic precipitator. S-903 is equipped and operated with an opacity monitor. |
| 26. | The suggested change should be implemented at this time. Monitoring has been added for S-1405, the sulfur collection pit, for visible particulate requiring that the Permittee/Owner/Operator visually inspect the outlet at A-1420, the venturi scrubber abating S-1405, for visible emissions. This new monitoring requirement appears in condition #19528 part 15 and in the monitoring table for S-1405 in part 7 of the proposed Title V permit. Visible emissions are not expected at A-1420. The proposed monitoring is appropriate because the sulfur at S-1405 exists as a hot liquid not as a friable solid, and because the sulfur pit's contents are covered with openings that are tubular vents that duct to A-1420, the venturi scrubber abating S-1405. The visible emissions monitoring will serve as a surrogate for monitoring for Regulation 6-310. |
| 27. | The suggested change concerns an issue beyond the scope of Title V. The appropriate level of monitoring for 8-28 has been set by the Board during rulemaking. Administrative imposition of additional monitoring by staff would be a direct contravention of a decision explicitly made by the Board. No change has been made to the permit. |
| 28. | The suggested change concerns an issue beyond the scope of Title V. The appropriate level of monitoring for 8-28 has been set by the Board during rulemaking. Administrative imposition of |

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| | additional monitoring by staff would be a direct contravention of a decision explicitly made by the Board. No change has been made to the permit. |
| 29. | The suggested change concerns an issue beyond the scope of Title V. The appropriate level of monitoring for 8-28 has been set by the Board during rulemaking. Administrative imposition of additional monitoring by staff would be a direct contravention of a decision explicitly made by the Board. No change has been made to the permit. |
| 30. | The suggested change concerns an issue beyond the scope of the revisions made to the earlier draft, and is therefore untimely. No change has been made to the permit. The District has reviewed the comment, and does not consider it to be correct. Detailed analysis has not, however, been prepared because the District has focused on responding to timely comments. See Consolidated Responses to Comments on Refinery Title V Permits (July 25, 1993) Response 304. |
| 31. | The change has been made to the permit, based upon the argument made in the comment. |
| 32. | The argument supporting the suggested change does not provide sufficient information or analysis to support the change. The comment has not identified any specific instance where a change is needed. No change has been made to the permit. |
| 33. | The suggested change concerns an issue beyond the scope of the revisions made to the earlier draft, and is therefore untimely. No change has been made to the permit. The District has reviewed the comment, and does not consider it to be correct. Detailed analysis has not, however, been prepared because the District has focused on responding to timely comments.. See Consolidated Responses to Comments on Refinery Title V Permits (July 25, 1993) Response 21. |
| 34. | The suggested change concerns an issue beyond the scope of the revisions made to the earlier draft, and is therefore untimely. No change has been made to the permit. The District has reviewed the comment, and does not consider it to be correct. Detailed analysis has not, however, been prepared because the District has focused on responding to timely comments. See Consolidated Responses to Comments on Refinery Title V Permits (July 25, 1993) Response 13. |
| 35. | The suggested change should be implemented at this time. The change has been made to the permit, based upon the argument made in the comment. |
| 36. | (Shell) The suggested change corrects a mistake. The mistake has been corrected in the final permit.<br>(Tesoro) There are no diesel backup generators at the Tesoro refinery or at Amorco. |
| 37. | The comment suggests a change that clarifies or improves the permit, but cannot be made at this time. No change has been made to the permit. The District will consider incorporating the suggestion at a later date. |
| 38. | The comment does not suggest a change, but requests additional information. The commentor may submit information requests to the District's Public Records Request program. |
| 39. | The comment suggests a change that clarifies or improves the permit, but cannot be made at this time. No change has been made to the permit. The District will consider incorporating the suggestion at a later date. |
| 40. | The comment suggests a change that clarifies or improves the permit, but cannot be made at this time. No change has been made to the permit. The District will consider incorporating the suggestion at a later date. The District has reviewed the specific example raised by the commenter, and has determined that the heat input capacity of S-6 exceeds 44 MW. |
| 41. | The argument supporting the suggested change does not provide sufficient information or analysis to support the change. The comment has not identified any specific instance where a change is needed. No change has been made to the permit. |
| 42. | The argument supporting the suggested change is factually incorrect. No change has been made to the permit. The requested information is already contained in each permit. The annual throughput limits for Shell are contained in permit conditions rather than Table II-A. Annual limits are included in Table II-A of the Tesoro permit. |
| 43. | The comment suggests a change that clarifies or improves the permit, but cannot be made at this time. No change has been made to the permit. The District will consider incorporating the suggestion at a later date. |
| 44 | The suggested change concerns an issue beyond the scope of Title V (e.g., NSR lookback, etc.) No change has been made to the permit. The District will review the issues raised by the comment, and will take appropriate steps at a later date. |
| 45. | (Shell) The suggested change corrects a mistake. The mistake has been corrected in the final permit. The MACT hammer milestones can be found in the Table IV-DV Facility.<br>(Tesoro) The MACT hammer milestones are already present in Table IV–A. The site remediation MACT was recently promulgated, so this MACT hammer milestone has been deleted. The site |

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| | remediation MACT applicable requirement has been added to Table IV–A as 40 CFR part 63 subpart GGGGG.<br>(Valero) The suggested change corrects a mistake. The mistake has been corrected in the final permit. The MACT hammer milestones can be found in the Table IV-Refinery Generally Applicable Condition. |
| 46. | (Chevron) The argument supporting a suggested change is factually incorrect. Subpart UUU requirements are already in the permit. No change has been made to the permit.<br>(Phillips) The argument supporting a suggested change is factually incorrect. Subpart UUU requirements are already in the permit. No change has been made to the permit.<br>(Tesoro) The suggested change corrects a mistake. The mistake has been corrected in the final permit.<br>(Valero) The suggested change corrects a mistake. The mistake has been corrected in the final permit. Added Subpart UUU Condition 20620 to Table IV - Refinery Generally Applicable Condition. Also added condition 20620 to Section VI. |
| 47. | The suggested change concerns an issue beyond the scope of the revisions made to the earlier draft, and is therefore untimely. No change has been made to the permit. The District has reviewed the comment, and does not consider it to be correct. Detailed analysis has not, however, been prepared because the District has focused on responding to timely comments. See Consolidated Responses to Comments on Refinery Title V Permits (July 25, 1993) Response 125. |
| 48. | The suggested change corrects a mistake. The mistake has been corrected in the final permit. |
| 49. | The comment suggests a change that clarifies or improves the permit, but cannot be made at this time. No change has been made to the permit. The District will consider incorporating the suggestion at a later date. |
| 50. | The suggested change corrects a mistake. The mistake has been corrected in the final statement of basis. |
| 51. | Information requests should be submitted to the District's Public Records Request process. The requested information is part of the Rule Development files for Regulation 8-5. |
| 52. | The suggested change corrects a mistake. The mistake has been corrected in the final permit. |
| 53. | (Chevron) The argument supporting the suggested change is factually incorrect. No change has been made to the permit. The applicable requirements are contained in Table IV.D.1.1.<br>(Phillips) The argument supporting the suggested change is factually incorrect. No change has been made to the permit. The applicable requirements are contained in Table IV-All Sources.<br>(Shell) The argument supporting the suggested change is factually incorrect. No change has been made to the permit. The applicable requirements are already included in the appropriate source tables (e.g., IV-M, IV-AQ, etc.) |
| 54. | The suggested change concerns an issue beyond the scope of the revisions made to the earlier draft, and is therefore untimely. No change has been made to the permit. See Consolidated Responses to Comments on Refinery Title V Permits (July 25, 1993) Response 364. |
| 55. | The suggested change corrects a mistake. The mistake has been corrected in the final permit. |
| 56. | The suggested change concerns an issue beyond the scope of the revisions made to the earlier draft, and is therefore untimely. No change has been made to the permit. The District has reviewed the comment, and does not consider it to be correct. Detailed analysis has not, however, been prepared because the District has focused on responding to timely comments. |
| 57. | The suggested change concerns an issue beyond the scope of the revisions made to the earlier draft, and is therefore untimely. No change has been made to the permit. The District has reviewed the comment, and does not consider it to be correct. Detailed analysis has not, however, been prepared because the District has focused on responding to timely comments. |
| 58. | The change has been made to the permit, based upon the argument made in the comment. |
| 59. | The suggested change concerns an issue beyond the scope of the revisions made to the earlier draft, and is therefore untimely. No change has been made to the permit. The District has reviewed the comment, and does not consider it to be correct. Detailed analysis has not, however, been prepared because the District has focused on responding to timely comments. |
| 60. | The suggested change concerns an issue beyond the scope of the revisions made to the earlier draft, and is therefore untimely. No change has been made to the permit. The District has reviewed the comment, and does not consider it to be correct. Detailed analysis has not, however, been prepared because the District has focused on responding to timely comments. |
| 61. | The argument supporting a suggested change does not provide sufficient information or analysis to support the change. No change has been made to the permit. |

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| 62. | The suggested change corrects a mistake. The mistake has been corrected in the final permit. |
| 63. | There is no District approved test method for these standards. These are design requirements imposed by the California Air Resources Board for this equipment. |
| 64. | The suggested change corrects a mistake. The mistake has been corrected in the final permit. |
| 65. | No monitoring is specified for these sources with regard to Regulation 8, Rule 2, Section 301 because the emission point for each source is the vent tail gas from the vacuum distillation column portion of each source. These emissions do not vent directly to atmosphere, but are vented to the No. 5 Gas Plant at S-806 for processing and introduction into Tesoro's fuel gas system for combustion as a fuel at the burners of various combustion sources at the refinery. The Statement of Basis has been augmented to include this explanation. |
| 66. | The suggested change corrects a mistake. The mistake has been corrected in the final permit. |
| 67. | The suggested change corrects a mistake. The mistake has been corrected in the final permit. Opacity is continuously monitored. |
| 68. | The argument supporting a suggested change is incorrect as a matter of law. Regulation 6-304 lists an opacity sensing device as one of several methods of determining compliance. |
| 69. | The suggested change corrects a mistake. The mistake has been corrected in the final permit. |
| 70. | The federal enforceability determinations in Table VII are redundant to those in Table IV. These will be removed when the permit is reformatted to combine Tables IV and VII at some future date. |
| 71. | The suggested change corrects a mistake. The mistake has been corrected in the final permit. |
| 72. | The argument supporting a suggested change is incorrect as a matter of law. All of the information required by 40 CFR §60.7 is included in monthly monitoring reports. |
| 73. | The argument supporting a suggested change is factually incorrect No change has been made to the permit. The suggestion is based on the following incorrect assumptions: that a fuel flow meter does not include a recorder. The measurements taken by all refinery fuel flow meters are routinely recorded. |
| 74. | The suggested change corrects a mistake. The change has been made to the permit, based upon the argument made in the comment. Permit Shield 8-18-303 for 11-7-302 & 303 has been removed. |
| 75. | The suggested change corrects a mistake. The change has been made to the permit, based upon the argument made in the comment. Permit Shield 8-18-302 for 11-7-307 has been removed. |
| 75a. | The suggested change corrects a mistake. The change has been made to the permit, based upon the argument made in the comment. Permit Shield 8-18-404 for 11-7-307.3 has been removed. |
| 76. | The suggested change corrects a mistake. The change has been made to the permit, based upon the argument made in the comment. Permit Shield 8-18-401.3 for 11-7-307.5 has been removed |
| 77. | The suggested change corrects a mistake. The change has been made to the permit, based upon the argument made in the comment. Permit Shield 8-18-304 for 11-7-308 has been removed. |
| 78. | See response to 77. |
| 79. | The suggested change corrects a mistake. The change has been made to the permit, based upon the argument made in the comment. Permit Shield 8-18-306.1 for 11-7-310.2 & 310.3 has been removed. |
| 80. | See response to 79. |
| 81. | The suggested change concerns an issue beyond the scope of the revisions made to the earlier draft, and is therefore untimely. No change has been made to the permit. The District has reviewed the comment, and does not consider it to be correct. Detailed analysis has not, however, been prepared because the District has focused on responding to timely comments. |
| 82. | The change has been made to the permit, based upon the argument made in the comment. Table IX A-3 has been deleted from the permit. |
| 83. | The mistake has been corrected in the final permit. Table IX A-11 has been deleted from the permit |
| 84. | See response to Comment 20. |
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| 86. | |
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| 88. | The argument supporting a suggested change is incorrect as a [illegible] |